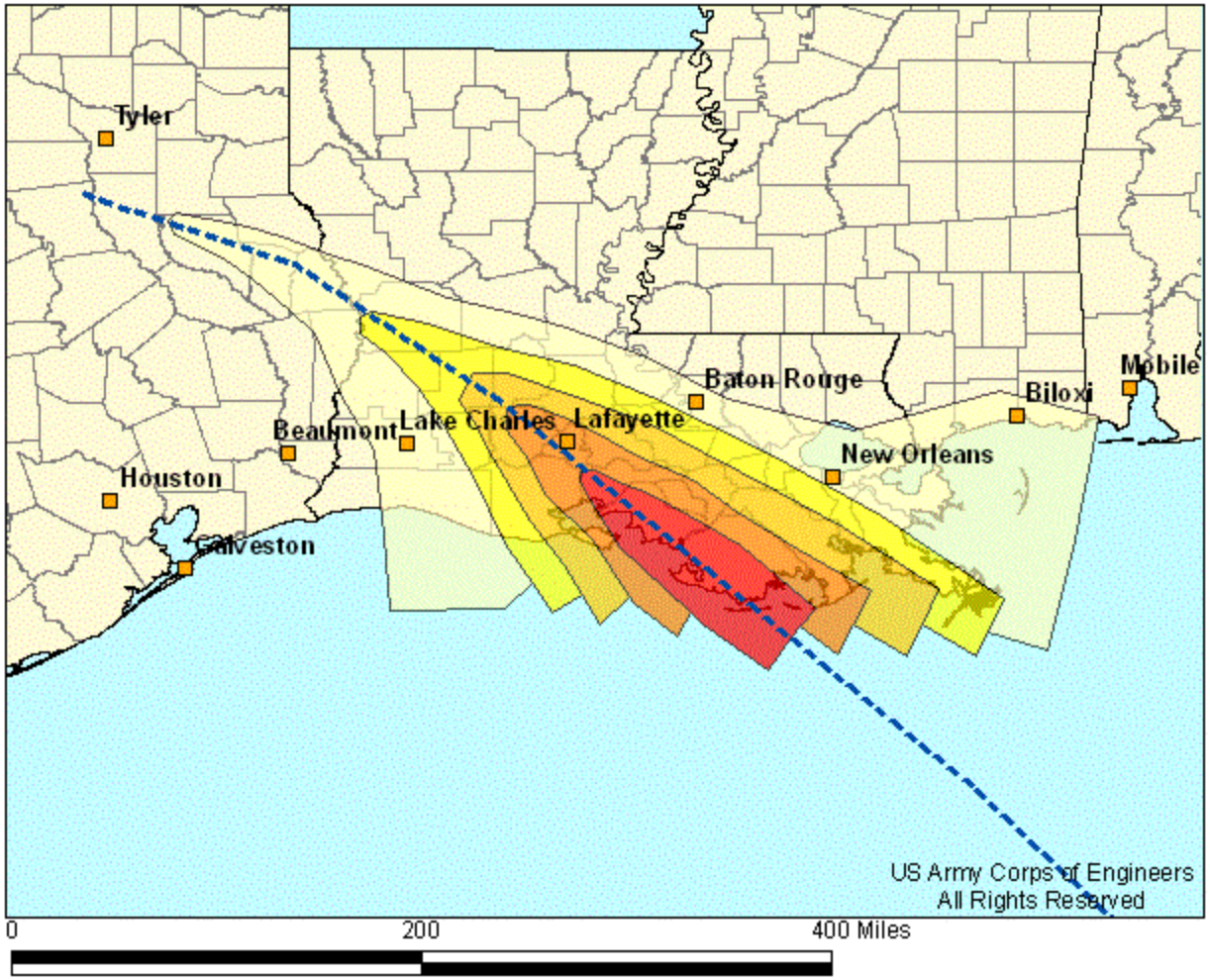
Hurricane Gustav Projected Damage Areas

US Army Corps of Engineers

Landfall Expected In About 54 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 4 storm making landfall south of Lafayette, LA.

Forecast Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a Category 4 storm making landfall south of Lafayette, LA. These projections are based on information from the NHC (1430 EDT 08/30/2008) forecast.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

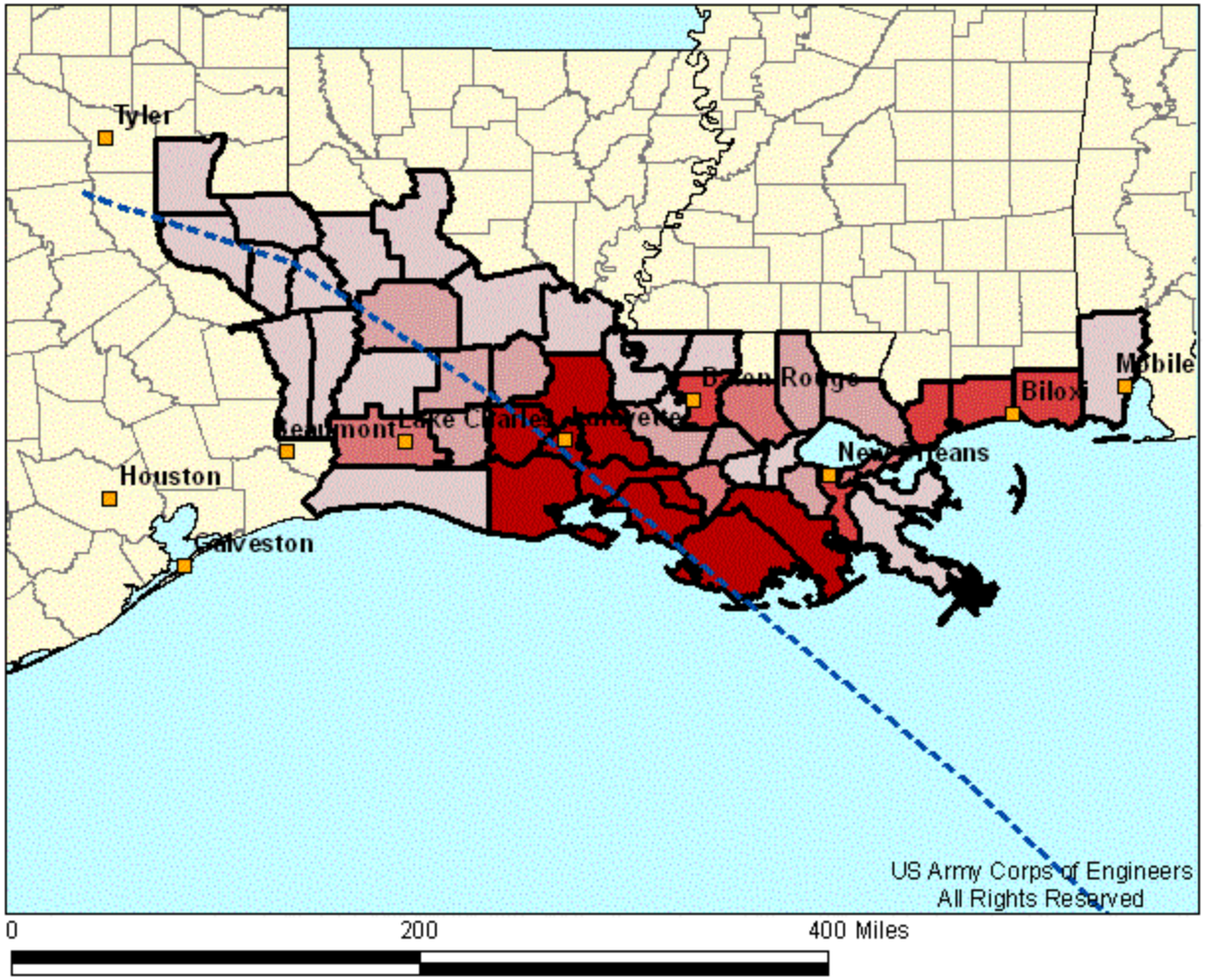
Hurricane Gustav Projected Damage Areas	
Generated By: Siemsen, LRL 1500 EDT 08/30/2008	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 13

US Army Corps of Engineers

Hurricane Gustav Debris Model

Landfall Expected In About 54 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Louisiana - 25,656,000 Yards
Mississippi - 1,945,000 Yards
Texas - 140,000 Yards
Alabama - 2,000 Yards

Model results per County on following page

This model is based on a Category 4 storm making landfall south of Lafayette, LA.

Forecast Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 4 storm making landfall south of Lafayette, LA. These projections are based on information from the NHC (1430 EDT 08/30/2008) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Debris Model	
Generated By: Siemsen, LRL 1500 EDT 08/30/2008	
Sources: HURREVAC LRL-DEBRIS	Page 2 of 13

US Army Corps of Engineers

Hurricane Gustav Debris Model

Landfall Expected In About 54 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Alabama		Mobile	2,000
Alabama	2,000		
Louisiana		Acadia	1,290,000
		Allen	119,000
		Ascension	214,000
		Assumption	359,000
		Avoyelles	25,000
		Beauregard	96,000
		Calcasieu	255,000
		Cameron	12,000
		East Baton Rouge	615,000
		East Feliciana	< 1,000
		Evangeline	166,000
		Iberia	3,027,000
		Iberville	137,000
		Jefferson	716,000
		Jefferson Davis	139,000
		Lafayette	5,491,000
		Lafourche	1,038,000
		Livingston	299,000
		Natchitoches	< 1,000
		Orleans	396,000
		Plaquemines	58,000
		Pointe Coupee	38,000
		Rapides	25,000
		Sabine	15,000
		St Bernard	32,000
		St Charles	120,000
		St James	76,000
		St John the Baptist	79,000

State	Yards per State	County	Yards per County
Louisiana		St Landry	1,110,000
(continued)		St Martin	1,630,000
		St Mary	2,463,000
		St Tammany	244,000
		Tangipahoa	212,000
		Terrebonne	3,339,000
		Vermilion	1,653,000
		Vernon	127,000
		West Baton Rouge	39,000
		West Feliciana	3,000
Louisiana	25,657,000		
Mississippi		Hancock	507,000
		Harrison	759,000
		Jackson	679,000
Mississippi	1,945,000		
Texas		Jasper	2,000
		Nacogdoches	71,000
		Newton	18,000
		Rusk	< 1,000
		Sabine	24,000
		San Augustine	18,000
		Shelby	7,000
Texas	140,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Debris Model

Generated By:
Siemsen, LRL 1500 EDT 08/30/2008

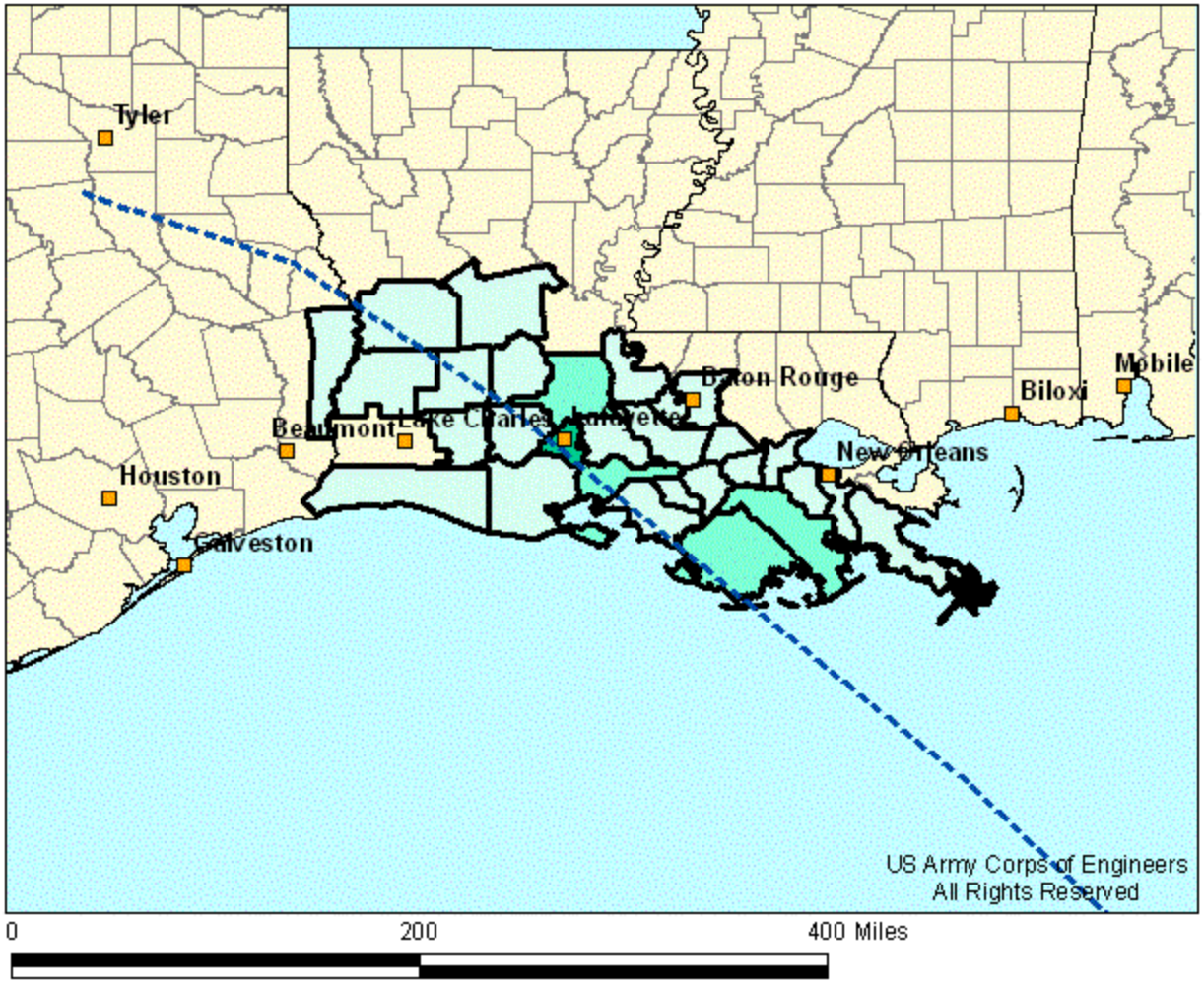
Sources:
HURREVAC
LRL-DEBRIS

Hurricane Gustav Commodities Model

US Army Corps of Engineers

Landfall Expected In About **54** Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
Louisiana – 22/43/86 Truckloads
Texas – 1/1/1 Truckloads

Model results per County on following page

This model is based on a Category 4 storm making landfall south of Lafayette, LA.

Forecast Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 4 storm making landfall south of Lafayette, LA. These projections are based on information from the NHC ***(1430 EDT 08/30/2008)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Commodities Model	
Generated By: Siemsen, LRL 1500 EDT 08/30/2008	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 13

US Army Corps of Engineers

Hurricane Gustav Commodities Model

Landfall Expected In About 54 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Louisiana		Acadia	4
		Allen	2
		Ascension	4
		Assumption	2
		Beauregard	2
		Cameron	1
		East Baton Rouge	3
		Evangeline	2
		Iberia	5
		Iberville	2
		Jefferson	2
		Jefferson Davis	2
		Lafayette	12
		Lafourche	6
		Plaquemines	1
		Pointe Coupee	1
		Rapides	1
		St Charles	3
		St James	2
		St John the Baptist	2
		St Landry	6
		St Martin	4
		St Mary	3
		Terrebonne	7
		Vermilion	4
		Vernon	2
		West Baton Rouge	1
Louisiana	86		
Texas		Newton	1
Texas	1		

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Commodities Model

Generated By:
Siemsen, LRL 1500 EDT 08/30/2008

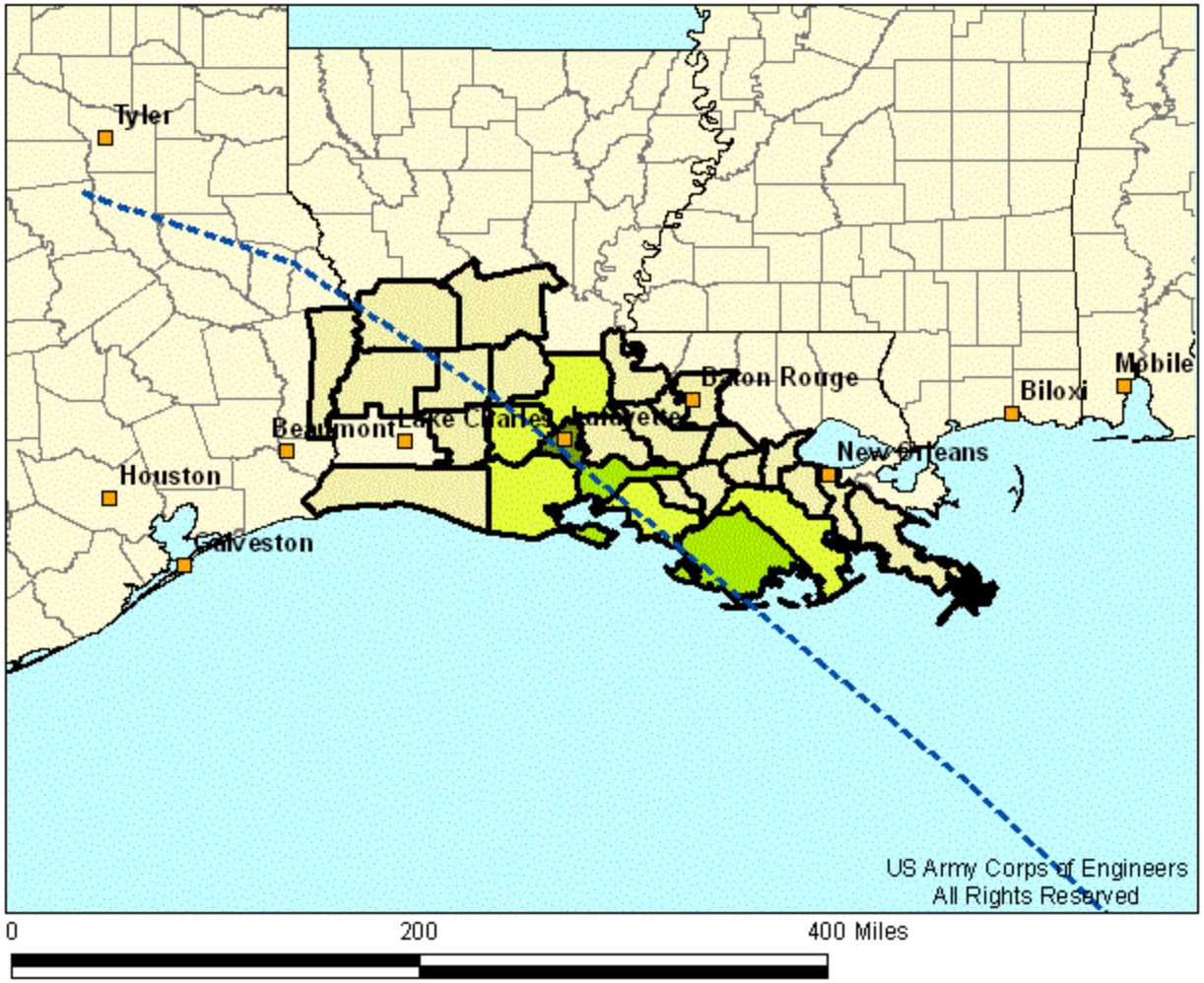
Sources:
HURREVAC
LRL-DEBRIS

Hurricane Gustav Temporary Roofing Model

US Army Corps of Engineers

Landfall Expected In About 54 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Louisiana - 37,200

Model results per County on following page

This model is based on a Category 4 storm making landfall south of Lafayette, LA.

Forecast Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 4 storm making landfall south of Lafayette, LA. These projections are based on information from the NHC (1430 EDT 08/30/2008) forecast. Temporary roofing is based on 3% in CAT 1, 6% in CAT 2, 11% in CAT 3 and 20% in CAT 4.

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Roofing Model	
Generated By: Siemsen, LRL 1500 EDT 08/30/2008	
Sources: HURREVAC LRL-DEBRIS	Page 6 of 13

US Army Corps of Engineers

Hurricane Gustav Temporary Roofing Model

Landfall Expected In About 54 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Acadia	2,200
		Allen	400
		Ascension	800
		Assumption	700
		Beauregard	300
		Cameron	< 100
		East Baton Rouge	500
		Evangeline	500
		Iberia	4,100
		Iberville	500
		Jefferson	400
		Jefferson Davis	400
		Lafayette	8,600
		Lafourche	2,200
		Plaquemines	200
		Pointe Coupee	< 100
		Rapides	< 100
		St Charles	500
		St James	300
		St John the Baptist	300
		St Landry	2,100
		St Martin	1,800
		St Mary	3,400
		Terrebonne	4,400
		Vermilion	2,100
		Vernon	300
		West Baton Rouge	200
Louisiana	37,200		
Texas		Newton	< 100
Texas			

Temporary roofing is based on 3% in CAT 1, 6% in CAT 2, 11 % in CAT 3 and 20% in CAT 4.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Roofing Model

Generated By:
Siemsen, LRL 1500 EDT 08/30/2008

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Gustav Temporary Housing Model

US Army Corps of Engineers

Landfall Expected In About 54 Hours

For Planning Purposes Only!

0 200 400 Miles

Post Landfall Temporary Housing Model Results

Louisiana - 6,600

Model results per County on following page

This model is based on a Category 4 storm making landfall south of Lafayette, LA.

Forecast Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 4 storm making landfall south of Lafayette, LA. These projections are based on information from the NHC (1430 EDT 08/30/2008) forecast. Temporary housing is based on 1% in CAT 2, 2% in CAT 3 and 5% in CAT 4.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Housing Model	
Generated By: Siemsen, LRL 1500 EDT 08/30/2008	
Sources: HURREVAC LRL-DEBRIS	Page 8 of 13

US Army Corps of Engineers

Hurricane Gustav Temporary Housing Model

Landfall Expected In About 54 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Acadia	400
		Allen	< 100
		Ascension	< 100
		Assumption	200
		Evangeline	< 100
		Iberia	1,000
		Iberville	< 100
		Jefferson	< 100
		Jefferson Davis	< 100
		Lafayette	1,600
		Lafourche	400
		Plaquemines	< 100
		St Charles	< 100
		St James	< 100
		St John the Baptist	< 100
		St Landry	400
		St Martin	400
		St Mary	900
		Terrebonne	900
		Vermilion	400
Louisiana	6,600		

Temporary housing is based on 1% in CAT 2, 2% in CAT 3 and 5% in CAT 4.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Housing Model

Generated By:
Siemsen, LRL 1500 EDT 08/30/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Population Model

Landfall Expected In About 54 Hours

For Planning Purposes Only!

0 200 400 Miles

Post Landfall Population Model Results

Louisiana - 1,222,000

Model results per County on following page

This model is based on a Category 4 storm making landfall south of Lafayette, LA.

Forecast Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 4 storm making landfall south of Lafayette, LA. These projections are based on information from the NHC (1430 EDT 08/30/2008) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Population Model	
Generated By: Siemsen, LRL 1500 EDT 08/30/2008	
Sources: HURREVAC LRL-DEBRIS	Page 10 of 13

US Army Corps of Engineers

Hurricane Gustav Population Model

Landfall Expected In About 54 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Louisiana		Acadia	60,000
		Allen	25,000
		Ascension	63,000
		Assumption	23,000
		Beauregard	18,000
		Cameron	< 1,000
		East Baton Rouge	35,000
		Evangeline	33,000
		Iberia	76,000
		Iberville	33,000
		Jefferson	31,000
		Jefferson Davis	28,000
		Lafayette	205,000
		Lafourche	93,000
		Plaquemines	14,000
		Pointe Coupee	5,000
		Rapides	2,000
		St Charles	44,000
		St James	22,000
		St John the Baptist	21,000
		St Landry	88,000
		St Martin	52,000
		St Mary	52,000
		Terrebonne	109,000
		Vermilion	56,000
		Vernon	22,000
		West Baton Rouge	12,000
Louisiana	1,222,000		
Texas		Newton	< 1,000
Texas			

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Population Model

Generated By:
Siemsen, LRL 1500 EDT 08/30/2008

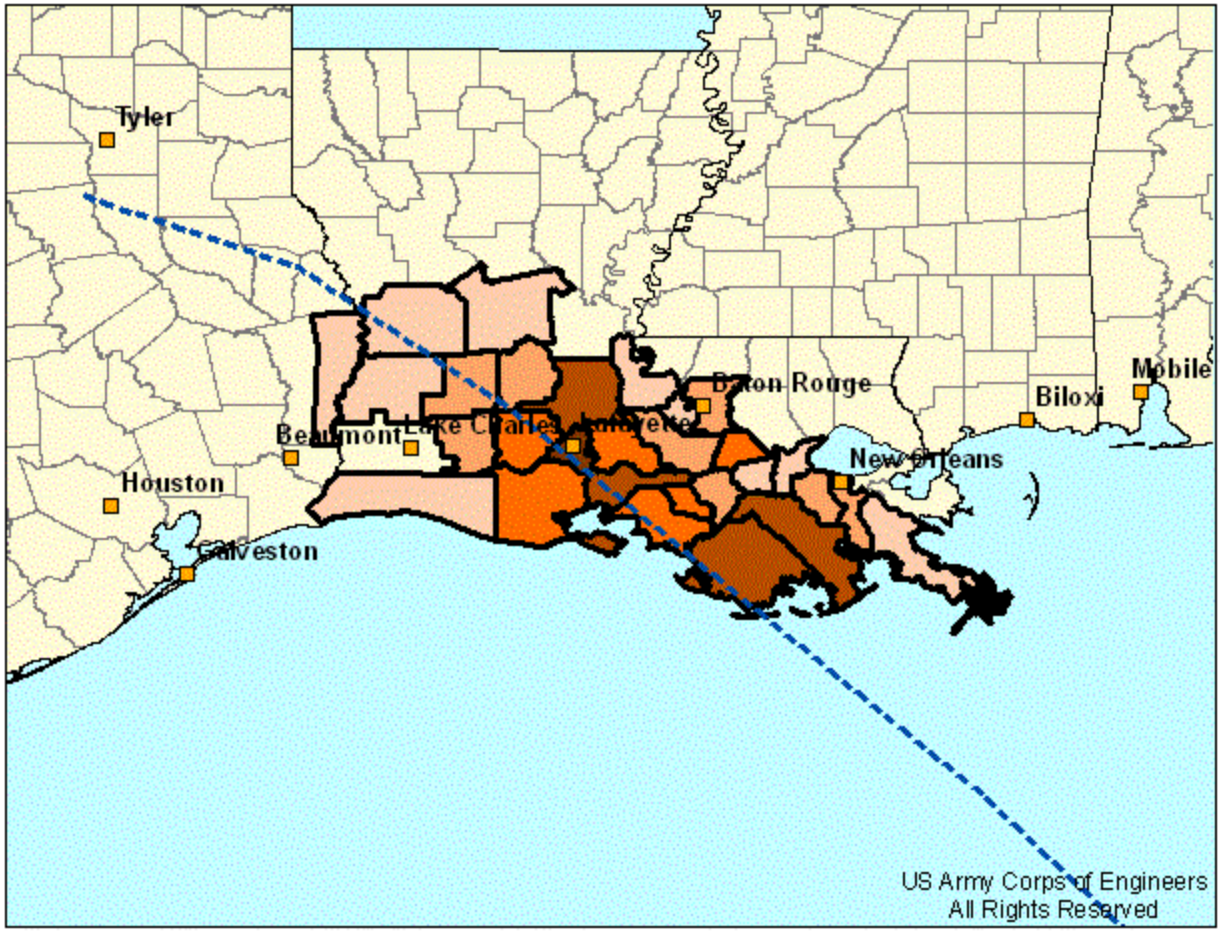
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Households Model

Landfall Expected In About 54 Hours

For Planning Purposes Only!



0 200 400 Miles

Post Landfall Households Model Results

Louisiana - 443,000

Model results per County on following page

This model is based on a Category 4 storm making landfall south of Lafayette, LA.

Forecast Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 4 storm making landfall south of Lafayette, LA. These projections are based on information from the NHC (1430 EDT 08/30/2008) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Households Model	
Generated By: Siemsen, LRL 1500 EDT 08/30/2008	
Sources: HURREVAC LRL-DEBRIS	Page 12 of 13

US Army Corps of Engineers

Hurricane Gustav Households Model

Landfall Expected In About 54 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Louisiana		Acadia	22,000
		Allen	8,000
		Ascension	22,000
		Assumption	9,000
		Beauregard	7,000
		Cameron	< 1,000
		East Baton Rouge	14,000
		Evangeline	12,000
		Iberia	27,000
		Iberville	11,000
		Jefferson	10,000
		Jefferson Davis	10,000
		Lafayette	78,000
		Lafourche	34,000
		Plaquemines	5,000
		Pointe Coupee	2,000
		Rapides	< 1,000
		St Charles	15,000
		St James	8,000
		St John the Baptist	7,000
		St Landry	33,000
		St Martin	19,000
		St Mary	19,000
		Terrebonne	38,000
		Vermilion	21,000
		Vernon	8,000
		West Baton Rouge	4,000
Louisiana	443,000		
Texas		Newton	< 1,000
Texas			

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Households Model

Generated By:
Siemsen, LRL 1500 EDT 08/30/2008

Sources:
HURREVAC
LRL-DEBRIS